

### **Amendments to the Specification**

Please replace paragraph [0017] with the following amended paragraph:

[0017] The present invention is directed to an optical data recording and storage medium that includes a reflective layer formed from a silver alloy that comprises, in addition to silver, about ~~0.1 to about 4.0~~ 0.2 to about 1.0 wt. %, based on the total weight of alloy, of samarium (Sm), in addition to copper, titanium and manganese in specific amounts as will be described.

Please replace paragraph [0030] with the following amended paragraph:

[0030] Corrosion resistant silver based alloys are formed, in accordance with the present invention, by the inclusion of ~~about 0.1 to about 4.0 wt. %, preferably~~ about 0.2 to about 1.0 wt. %, more preferably, about 0.25 to about 0.35 wt. %, based on the total weight of alloy, of the rare earth metal samarium (Sm). The high solubility of samarium (Sm) compared to other reactive rare earth metals enables it to be added in relatively large amounts of the metal without the formation of secondary phases, which can become particulates during sputtering and cause defects in the reflective coating. A multiphase alloy may sputter as a single-phase layer, but if the coated layer is not stable as a single-phase material, then thermal exposure can cause the precipitation of the second phase, and this too will result in defects, particularly under harsh test conditions. For example, separation of a rare earth metal phase in a silver alloy comprising a semi-reflective layer may create dark spots and cause errors in the optical data.

Please replace paragraph [0033] with the following amended paragraph:

[0033] Copper (Cu) ~~is and can also be optionally~~ included in the silver alloys of the present invention to facilitate their manufacturability as well as to improve their shelf life and their corrosion resistance when exposed to the harshest environmental testing conditions. The amount of copper (Cu) included in the alloys is ~~preferably about 0.2 to about 2.0 wt. %, more preferably,~~ about 0.25 to about 1.0 wt. %, based on the total weight of alloy.

Please replace paragraph [0034] with the following amended paragraph:

[0034] Titanium (Ti), while it does not add substantially to corrosion resistance, has good solubility, 2 wt. %, in silver, and ~~is and can also be optionally~~ included in the silver alloys of the present invention because of its scavenging effect during melting and alloying. It also acts as a grain refiner during rolling and annealing of the cast alloy ingots used to make the sputtering targets. The amount of titanium (Ti) included in the alloys is ~~preferably about 0.05 to about 0.5 wt. %, more preferably,~~ about 0.1 to about 0.3 wt. %, based on the total weight of the alloy.

Please replace paragraph [0035] with the following amended paragraph:

[0035] Manganese (Mn), although it may add only marginally to corrosion resistance, has high solubility, 33 wt. %, in silver ~~is and can also be optionally~~ included in the silver alloys of the present invention, providing improvement in sputtering characteristics and control of reflectivity.

The amount of manganese (Mn) included in the alloys is ~~preferably about 0.1 to about 1.5 wt. %, more preferably, about 0.2 to about 0.8 wt. %, based on the total weight of the alloy.~~

Please delete in its entirety paragraph [0036], which starts with "Aluminum (Al), which also has good silver solubility...."

Please replace paragraph [0037] with the following amended paragraph:

[0037] Samarium (Sm) is included in the silver-based alloy of the present invention in amounts as stated above, whereas the addition of samarium in greater amounts will an amount not exceeding more than about 4.0 wt. %, based on the total weight of the alloy. ~~Addition of samarium (Sm) in an amount greater than about 4.0 wt. % may~~ negatively affect silver reflectivity and thereby compromise the semi-reflective layer.

Please delete in its entirety paragraph [0038], which starts with "Optionally, the silver alloys of the present invention can also include..."

Please replace paragraph [0039] with the following amended paragraph:

[0039] Thin semi-reflective layers can be formed from the alloys of the present invention by sputtering techniques well known in the art. The following examples of ~~useful~~ silver alloys are presented to illustrate the scope of the invention:

Please replace paragraph [0060] with the following amended paragraph:

[0060] DVD's I-1 and I-2 ~~of the present invention,~~ which include, respectively, 1.0 and 0.25 wt. % samarium (Sm) in the silver semi-reflective layer, produce passing results in all three of the standard industry tests under 70/50/96 exposure conditions but failure in the same tests under 80/85/96 conditions.

Please replace paragraph [0064] with the following amended paragraph:

[0064] DVD I-6 ~~of the invention~~ is similar to DVD I-3 except for its silver alloy containing a higher concentration of samarium (Sm), 0.75 wt. % vs 0.25 wt. %; the concentration of copper in both alloys is the same, 0.7 wt. %. DVD I-6 also produces very good test results, failing only the PI test under the stringent 80/85/96 conditions.

Please replace paragraph [0065] with the following amended paragraph:

[0065] Similarly, DVD I-7 ~~of the invention,~~ which contains the same concentration of samarium (Sm), 1.0 wt. %, as DVD I-1 but also includes 0.5 wt. % copper (Cu), gives very good results, failing only the I-14 test under the 80/85/96 exposure conditions.

Please replace paragraph [0066] with the following amended paragraph:

[0066] DVD I-8 ~~of the invention~~ is similar to DVD I-3 except for its silver alloy containing a considerably higher concentration of samarium (Sm), 4.0 wt. % vs 0.25 wt. %; the concentration

of copper in both alloys is the same, 0.7 wt. %. DVD I-8 passes all three tests under the industry standard conditions but fails the PI and I-14 tests under the stringent 80/85/96 conditions.

Please replace paragraph [0067] with the following amended paragraph:

[0067] As demonstrated by the results presented in TABLE 2, inclusion of samarium (Sm) at levels of preferably up to about 1.0 wt. %, more preferably, about 0.25 to about 0.35 wt. %, in silver alloys comprising DVD semi-reflective layers, provides beneficial results under severe environmental test conditions. Further inclusion of copper (Cu), titanium (Ti) and manganese (Mn) in amounts as described ~~preferably up to about 1.0 wt. %;~~ in the samarium (Sm)-containing silver alloys enhances the benefit.